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(71) Applicant: **LG Electronics Inc.**
Yongdungpo-gu
Seoul (KR)

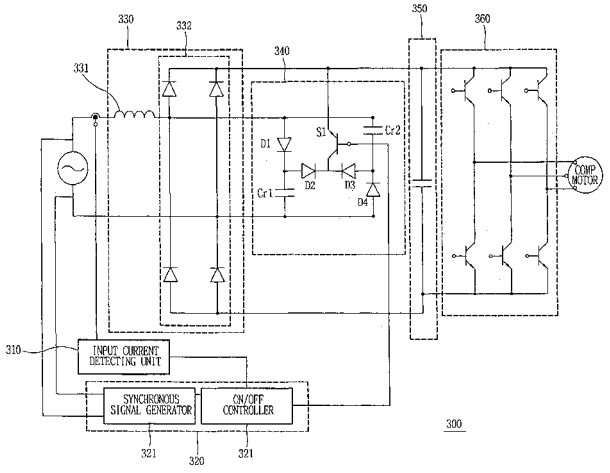
(72) Inventors:
- **Lim, Sun-Kyoung**
  Geumcheon-Gu
  Seoul (KR)
- **Kim, Dai-Hyun**
  Gwangmyeong
  Gyeonggi-Do (KR)
- **Kim, Hag-Wone**
  Cheonan
  Chungcheongnam-Do (KR)

(74) Representative: **Vossius & Partner**
Siebertstrasse 4
81675 München (DE)

(54) **Apparatus and method for supplying DC power source**

(57) An apparatus and method for supplying a direct current power source capable of compensating a power factor of an input power source by increasing and decreasing energy required by load changes, the apparatus comprising: an input current detecting unit for detecting an input current amount to determine a load size, a switching control unit for outputting a switching control signal to compensate a power factor of an input power source based upon the determined load size, a filtering/rectifying unit for reducing a harmonic of the input current and rectifying an input AC voltage, a power factor compensating unit for supplying charged energy to the load based upon the switching control signal, a smoothing unit for smoothing the rectified input AC voltage into a DC voltage, and an inverter for converting the smoothed DC voltage into an AC voltage and outputting the converted AC voltage to drive the load, whereby the power factor compensation (PFC) standard can be satisfied although the load is increased, and a fabricating cost can be reduced by using a reactor with a low capacity.

FIG. 3



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EUROPEAN SEARCH REPORT

Application Number
EP 06 01 7551

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
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